

1998 Index

IEEE Transactions on Knowledge and Data Engineering

Vol. 10

This index covers all technical items - papers, correspondence, reviews, etc. that appeared in this periodical during 1998, and items from previous years that were commented upon or corrected in 1998. In the case of magazines, departments and other items may be also covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Subject cross-references are included to assist in finding items of interest. Note that the item title is found only under the primary entry in the Author Index.

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data and knowledge management in multimedia systems, part I, special section intro. *Berra, P.B., +, T-KDE Nov-Dec 98* 868-871

Visual languages

knowledge-based image retrieval with spatial and temporal constructs.

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multimedia, timeline and simul. data representation. *Dionisio, J.D.N., +, T-KDE Sep-Oct 98* 746-767



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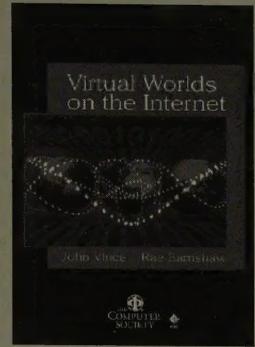
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Virtual Worlds on the Internet

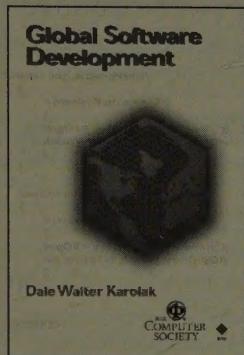
John Vince and Rae Earnshaw



In recent years, computer graphics has evolved into four major disciplines: computer animation, image processing, visualization, and virtual reality. Now these technologies are converging into one seamless digital medium resulting in various tools that will transform the way we work in the next century.

Virtual Worlds on the Internet examines how the latest developments in virtual environments, computer animation, communication networks, and the Internet are being configured to create revolutionary tools and systems. Vince and Earnshaw have selected twenty papers they believe will influence computer systems of the twenty-first century.

360 pages. 7" x 10" Softcover. January 1999. ISBN 0-8186-8700-2
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Global Software Development Managing Virtual Teams and Environments

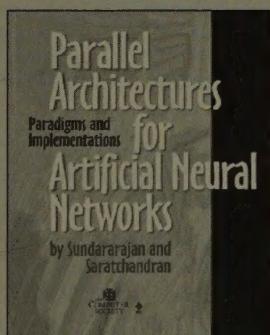
by Dale Walter Karolak



Global Software Development covers the delicate tasks of managing diverse cultural expectations, establishing responsibility, implementing accountability, and defining process and product ownership. Subtle changes in the cost, schedule, and quality issues involved in normal product delivery are also examined. Although focused on global development projects, the book discusses issues that apply to most distributed software development environments.

Following the life cycle of a typical software development project, the text examines the growing need for global software development and the foundations of its strategy. From setting up the initial environment and project team, the book progresses through every development stage emphasizing the differences between traditional and virtual management. The final chapter presents three case studies illustrating the principles and activities described in the preceding chapters.

152 pages. 6" x 9" Softcover. December 1998. ISBN 0-8186-8701-0
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Parallel Architectures for Artificial Neural Networks Paradigms and Implementations

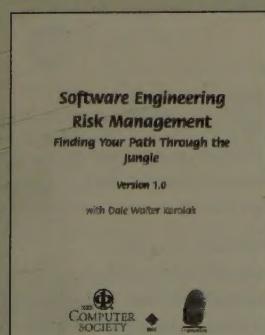
N. Sundararajan and P. Saratchandran



An excellent reference for neural networks research and application, this book covers the parallel implementation aspects of all major artificial neural network models in a single text. *Parallel Architectures for Artificial Neural Networks* details implementations on various processor architectures built on different hardware platforms, ranging from large, general purpose parallel computers to custom built MIMD machines.

Working experts describe their implementation research and results on the theoretical analysis of parallel implementation schemes on MIMD message passing machines, parallel implementation of BP neural networks on general purpose, large, parallel computers, and four specific purpose parallel neural computer configurations. Aimed at graduate students and researchers working in artificial neural networks and parallel computing, this text can be used by graduate level educators to illustrate parallel computing methods for ANN simulation.

410 pages. 7" x 10" Hardcover. November 1998. ISBN 0-8186-8399-6
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Software Engineering Risk Management (SERIM)

Version 1.0 for Windows 95

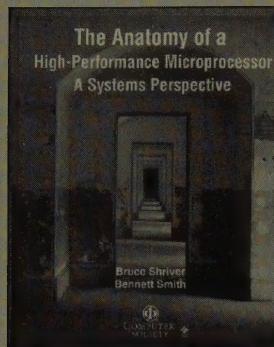
with Dale Walter Karolak



By taking periodic "readings" on the status of software development projects, SERIM allows the developer to focus on high-priority risk areas. After identifying possible risks, SERIM helps develop proactive plans for mitigating risk before it can sabotage a project. SERIM may also be used in the pre-requirements phase to develop risk projections that help plan projects more realistically.

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The Anatomy of a High-Performance Microprocessor A Systems Perspective (Interactive Book & CD-ROM)

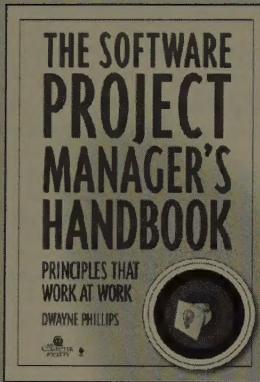
by Bruce Shriver and Bennett Smith

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This work describes in detail the microarchitecture of a high-performance microprocessor, giving an integrated treatment of platform and systems issues relating to the design and implementation of microprocessor-based systems. Unique in content and approach, the accompanying interactive CD-ROM provides multiple books and a wide variety of materials.

Shriver and Smith use AMD's K6 3D® microprocessor as the "case study" basis for discussions on microarchitecture issues and they use increasingly important industry specifications and standards for platforms and systems issues. This book is an important reference for individuals building systems using microprocessors and readers looking for significant insights into fundamental design guidelines that transcend the design, implementation, and use of a specific microprocessor.

584 pages. 8" x 10" Hardcover / CD-ROM. July 1998. ISBN 0-8186-8400-3
Catalog # BP08400 — \$44.00 Members / \$49.00 List



The Software Project Manager's Handbook Principles that Work at Work

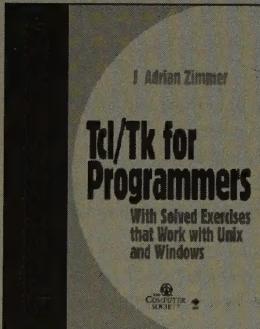
by Dwayne Phillips

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This book emphasizes software project management at work. The author's unique approach concentrates on the concept that success on software projects has more to do with how people think individually and in groups than with programming. He summarizes past successful projects and why others failed. Visibility and communication are more important than SQL and C. The book discusses the technical and people aspects of software and how they relate to one another.

408 pages. 7" x 10" Softcover. June 1998. ISBN 0-8186-8300-7
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Tcl/Tk for Programmers with Solved Exercises that Work with Unix and Windows

by J. Adrian Zimmer

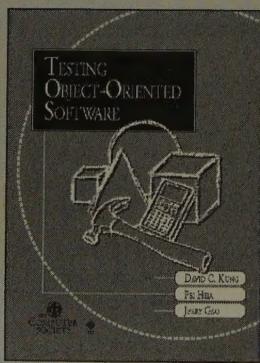
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This introduction to Tcl/Tk bridges the gaps between introductions, comprehensive manuals, and collections of scripts that solve particular problems. There are over 200 exercises with solutions that run on both Unix and Windows platforms.

Tcl/Tk for Programmers is an introduction to the high-level Tcl/Tk scripting language for experienced programmers with either a Unix or Windows background. The book includes a short introduction to TCP/IP as well as instructions on writing client-side scripts, GUI interfaces, and integrating scripts with C/C++.

After the delivery of version 8.0/8.0, the unusually fast development of Tcl/Tk slowed to a more normal pace. *Tcl/Tk for Programmers* covers this version while describing its major differences with the previous version, 7.6/4.2, and the experimental alpha version, 8.1/8.1.

560 pages. 7" x 10" Softcover. September 1998. ISBN 0-8186-8515-8
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Testing Object-Oriented Software

David C. Kung, Pei Hsia, and Jerry Gao

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Object-oriented programming increases software reusability, extensibility, interoperability, and reliability. Software testing is necessary to realize these benefits by uncovering as many programming errors as possible at a minimum cost. A major challenge to the software engineering community remains how to reduce the cost while improving the quality of software testing.

Testing Object-Oriented Software illustrates these differences and discusses object-oriented software testing problems, focusing on the difficulties and challenges testers face. The book provides a general framework for class- and system-level testing and examines object-oriented design criteria and high testability metrics. It offers object-oriented testing techniques, ideas and methods for unit testing, and object-oriented program integration-testing strategy.

288 pages. 8 1/2" x 11" Softcover. October 1998. ISBN 0-8186-8520-4
Catalog # BP08520 — \$30.00 Members / \$40.00 List



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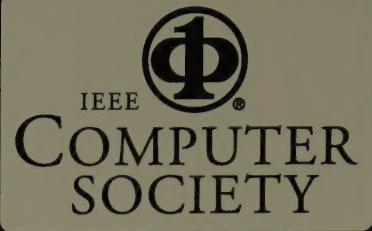
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